

Case No. PU-14-842 Dakota Access Pipeline Project PU-742-16 Keitu Engineers & Consultants, Inc.

Site/Project Location: MP 118.5 Spread 9, M.P. 1.5 & 42 Spread 8 Date of Inspection: 29 September 2016

Pipeline ROW going through tree/shrubs near Arnegard and Dunn Center in McKenzie and Dunn County.

Observed Work / Weather Conditions

Visits occurred between 1:45 pm to 5:30 pm. Weather included mostly sunny skies with unrestricted visibility. South wind reportedly at 11-19 mph. No precipitation during visit, ROW dry. Temperature 65-70 °F.

Trenching and tie-in crews were in the area inspected on Spread 9. ROW restoration activities, except seeding, appeared complete for areas inspected on Spread 8.

Top Soil Management / Condition / Erosion Control / Stormwater Management

Topsoil appeared to be adequately segregated and stored from the subsoil on Spread 9. Topsoil depth was about 4-8" in the area inspected. Storm water BMPs were up and in good condition.

Vegetation Condition

Tree removal was confirmed to be 85 feet or less at M.P. 118.5 Spread 9 and M.P. 42 Spread 8. These areas were proposed to be cleared the full 150' based on shape files received from the ND Public Service Commission. As reported on September 1, 2016, M.P. 1.5 Spread 8 had trees and shrubs were cleared 127 feet at the narrowest visible width. All shrubs removed were completely stripped during topsoil removal and were not cut flush with ground. Shrub species noted and observed were silver buffaloberry and chokecherry.

Depth of Cover / Road Crossings / River Crossings / Riparian Condition at HDD Bore Sites

Trenches open appeared to be at correct depth of cover. No open water riparian/HDD bore sites were observed.

Other Project Issues

According to Docket 45 - Tree and Shrub Inventory submitted by Dakota Access to the PSC, shrubs in native growth and planted areas would be mitigated by natural regeneration outside the permanent ROW. However, the PSC requires that all shrubs cleared must be replaced at 2:1 ratio with stem cuttings.

Deficiencies

As noted on September 1, 2016, tree/shrub removal extended significantly beyond 85 feet approved at M.P. 1.5 Spread 8. Shrubs were observed and documented on the ROW edges. Further investigating should occur whether these tree/shrubs were surveyed. Shrubs outside the permanent ROW may be mitigated by natural regeneration if: shrubs are cut flush the surface of the ground and if the native topsoil is preserved, but that was not the observed condition i.e. shrubs cleared at M.P. 1.5 on Spread 8 were not cut flush with the ground

Actions Taken/To Be Taken

Further investigation should occur to see if approved May 2016 reroutes were surveyed for trees/shrubs.

Keitu Inspector: RIS **Inspection Report Submitted:** 6 October 2016



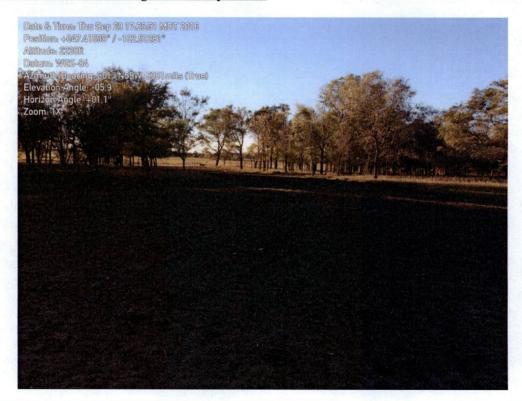
Report Photo #1 "Tree row at M.P. 118.5 Spread 9":

47.82001°N 103.43338°W



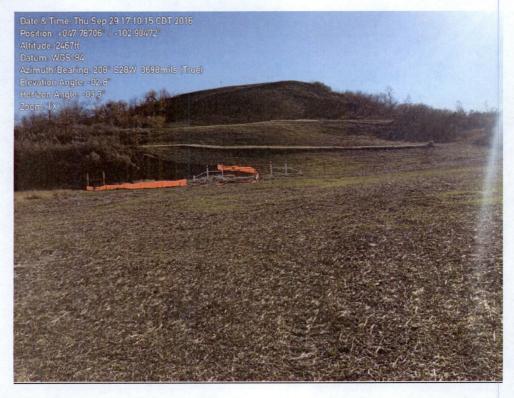
Report Photo #2 "Tree Clearing at M.P. 42 Spread 8":

47.41595°N 102.51281°W



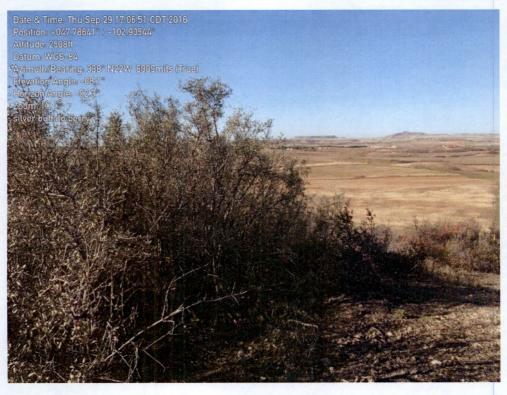
Report Photo #3 "Tree Clearing at M.P. 1.5 Spread 8":

47.78706°N 102.90472°W



Report Photo #4 "Silver buffaloberry cleared at M.P. 1.5":

47.78641°N 102.90544°W



Project Map Inspection Location:

